

Serial No. 09/989,962
June 7, 2004
Reply to the Office Action dated March 16, 2004
Page 2 of 6

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (previously presented): An MIM capacitor comprising:
a lower electrode comprising a plurality of metal layers including a top metal layer;

an upper electrode; and
a dielectric layer positioned between said lower electrode and said upper electrode,

wherein the top metal layer includes an insulating metal oxide layer disposed on the entire surface thereof; and

wherein the lower electrode is formed by a first titanium layer, a platinum layer, a gold layer, and a second titanium layer.

Claim 2 (original): An MIM capacitor according to Claim 1, wherein the top metal layer comprises a material selected from transition metals and alloys thereof which are capable of forming insulating layers by oxidation.

Claim 3 (previously presented): An MIM capacitor according to Claim 1, wherein the top metal layer comprises one of said first and second titanium layers.

Claim 4 (original): An MIM capacitor according to Claim 1, wherein said dielectric layer comprises silicon nitride.

Claim 5 (original): An MIM capacitor according to Claim 4, wherein the surface of said dielectric layer is oxidized to form an oxidized silicon nitride layer.

Serial No. 09/989,962
June 7, 2004
Reply to the Office Action dated March 16, 2004
Page 3 of 6

Claims 6-10 (canceled).

Claim 11 (original): A microwave monolithic integrated circuit comprising an MIM capacitor as set forth in Claim 1.

Claim 12 (canceled).

Claim 13 (previously presented): An MIM capacitor according to Claim 1, wherein the upper electrode is formed by a titanium layer, a platinum layer, and a gold layer.

Claim 14 (previously presented): An MIM capacitor according to Claim 1, wherein the lower electrode is formed, in order, by the first titanium layer, the platinum layer, the gold layer, and the second titanium layer.

Claim 15 (previously presented): An MIM capacitor according to Claim 1, wherein the upper electrode is formed, in order, by a titanium layer, a platinum layer, and a gold layer.